

## **MAGNETIC ARRAY POSITION SENSOR**

### Abstract of the Disclosure

[0056] A sensor apparatus and method that can measure either a linear position or an angular position of a device. A linear array of galvanomagnetic sensing elements is fixedly mountable adjacent the device. A target is connectable to the device such that the target moves adjacent a surface of the linear array in response to movement of the device and is shaped so that a magnetic flux density curve resulting from excitation of the sensing elements includes a peak and/or a valley. A first circuit excites each of the sensing elements, and a second circuit measures a magnetic flux density value at each of the sensing elements. A maximum and/or a minimum of the flux density curve indicates the position of the device.